

CLAIMS:

1. (Cancelled)

2. (Previously Presented) A decoder for decoding encoded video data which comprises blocks of transform coefficients, comprising:

- a reconstruction information receiver configured to acquire information from an encoder regarding reconstruction of the blocks of transform coefficients;
- an entropy decoder configured to decode the blocks of transform coefficients into decoded blocks of transform coefficients; and
- a coefficient list maker configured to combine, according to the acquired reconstruction information, the transform coefficients of the decoded blocks into a first list of transform coefficients in which the transform coefficients of a respective decoded block are interleaved with the transform coefficients of another decoded block.

3. (Previously Presented) A decoder according to claim 2, wherein the decoded block comprises 4×4 transform coefficients.

4. (Previously Presented) A decoder according to claim 2, wherein the first list comprises 8×8 transform coefficients.

5. (Previously Presented) A decoder according to claim 2, further comprising a transformer configured to perform an inverse discrete cosine transform on the transform coefficients in the first list.

6. (Previously Presented) A decoder according to claim 2, wherein according to the acquired reconstruction information, the coefficient list maker constructs a second list of transform coefficients from a single decoded block of transform coefficients.

7. (Previously Presented) A decoder according to claim 2, further comprising a second list maker configured to make a third list of transform coefficients from at least one first list of transform coefficients.

8. (Previously Presented) A decoder according to claim 7, wherein the second list comprises 16 x 16 transform coefficients.

9. (Previously Presented) A method for decoding encoded video data which comprises blocks of transform coefficients, comprising:

acquiring information from an encoder regarding reconstruction of the blocks of transform coefficients;

entropy-decoding the blocks of transform coefficients into decoded blocks of transform coefficients; and

according to the acquired reconstruction information, combining the transform coefficients of the decoded blocks into a first list of transform coefficients in which the transform coefficients of a respective decoded block are interleaved with the transform coefficients of another decoded block.

10. (Previously Presented) A method according to claim 9, wherein the decoded block comprises 4 x 4 transform coefficients.

11. (Previously Presented) A method according to claim 9, wherein the first list comprises 8 x 8 transform coefficients.

12. (Previously Presented) A method according to claim 9, further comprising performing an inverse discrete cosine transform on the transform coefficients in the first list.

13. (Previously Presented) A method according to claim 9, further comprising constructing, according to the acquired reconstruction information, a second list of transform coefficients from a single decoded block of transform coefficients.

14. (Previously Presented) A method according to claim 9, further comprising making a third list of transform coefficients from at least one first list of transform coefficients.

15. (Previously Presented) A method according to claim 14, wherein the second list comprises 16×16 transform coefficients.

16. (New) A computer readable medium encoded with computer readable instructions for decoding encoded video data which comprises blocks of transform coefficients, the computer readable instructions implemented by a computer to:

acquire information from an encoder regarding reconstruction of the blocks of transform coefficients;

entropy-decode the blocks of transform coefficients into decoded blocks of transform coefficients; and

according to the acquired reconstruction information, combine the transform coefficients of the decoded blocks into a first list of transform coefficients in which the transform coefficients of a respective decoded block are interleaved with the transform coefficients of another decoded block.

17. (New) The computer readable medium according to claim 16, wherein the decoded block comprises 4×4 transform coefficients.

18. (New) The computer readable medium according to claim 16, wherein the first list comprises 8×8 transform coefficients.

19. (New) The computer readable medium according to claim 16, further comprising instructions implemented by the computer to perform an inverse discrete cosine transform on the transform coefficients in the first list.

20. (New) The computer readable medium according to claim 16, further comprising instructions implemented by the computer to construct, according to the acquired reconstruction information, a second list of transform coefficients from a single decoded block of transform coefficients.

21. (New) The computer readable medium according to claim 16, further comprising instructions implemented by the computer to make a third list of transform coefficients from at least one first list of transform coefficients.

22. (New) The computer readable medium according to claim 21, wherein the second list comprises 16 x 16 transform coefficients.